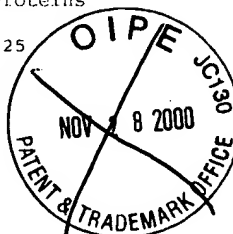


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3 <110> APPLICANT: Reed, John C.
 4 Zapata, Juan M.
 5 <120> TITLE OF INVENTION: Novel TRAF Family Proteins
 6 <130> FILE REFERENCE: P-LJ 4453
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/706,325
 C--> 11 <141> CURRENT FILING DATE: 2000-11-03
 13 <150> PRIOR APPLICATION NUMBER: US 09/434,784
 14 <151> PRIOR FILING DATE: 1999-11-05
 16 <160> NUMBER OF SEQ ID NOS: 32
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 21 <211> LENGTH: 4022
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 37 Met Asn His Gln Gln Gln Gln Gln Gln Lys
 38 1 5 10
 40 gcg gcc gag cag cag ttg agc gag ccc gag gac atg gag atg gaa gcg 280
 41 Ala Gly Gln Gln Gln Leu Ser Glu Pro Glu Asp Met Glu Met Glu Ala
 42 15 20 25
 44 gga gat aca gat gac cca cca aga att act cag aac cct gtg atc aat 328
 45 Gly Asp Thr Asp Asp Pro Pro Arg Ile Thr Gln Asn Pro Val Ile Asn
 46 30 35 40
 48 ggg aat gtg gcc ctg agt gat gga cac aac acc gcg gag gag gac atg 376
 49 Gly Asn Val Ala Leu Ser Asp Gly His Asn Thr Ala Glu Glu Asp Met
 50 45 50 55
 52 gag gat gac acc agt tgg cgc tcc gag gca acc ttt cag ttc act gtg 424
 53 Glu Asp Asp Thr Ser Trp Arg Ser Glu Ala Thr Phe Gln Phe Thr Val
 54 60 65 70 75
 56 gag cgc ttc agc aga ctg agt gag tgg gtc ctt agc cct ccg tgt ttt 472
 57 Glu Arg Phe Ser Arg Leu Ser Glu Ser Val Leu Ser Pro Pro Cys Phe
 58 80 85 90
 60 gtg cga aat ctg cca tgg aag att atg gtg atg cca cgc ttt tat cca 520
 61 Val Arg Asn Leu Pro Trp Lys Ile Met Val Met Pro Arg Phe Tyr Pro
 62 95 100 105
 64 gac aga cca cac caa aaa agc gta gga ttc ttt ctc cag tgc aat gct 568
 65 Asp Arg Pro His Gln Lys Ser Val Gly Phe Phe Leu Gln Cys Asn Ala
 66 110 115 120
 68 gaa tct gat tcc acg tca tgg tct tgc cat gca caa gca gtg ctg aag 616
 69 Glu Ser Asp Ser Thr Ser Trp Ser Cys His Ala Gln Ala Val Leu Lys



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PATENT APPLICATION: US/09/706,325

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74 140      145      150      155
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77 His Leu Phe Phe His Lys Glu Asn Asp Trp Gly Phe Ser Asn Phe Met
78      160      165      170
80 gcc tgg agt gaa gtg acc gat cct gag aaa gga ttt ata gat gat gac 760
81 Ala Trp Ser Glu Val Thr Asp Pro Glu Lys Gly Phe Ile Asp Asp Asp
82      175      180      185
84 aaa gtt acc ttt gaa gtc ttt gta cag gcg gat gct ccc cat gga gtt 808
85 Lys Val Thr Phe Glu Val Phe Val Gln Ala Asp Ala Pro His Gly Val
86      190      195      200
88 gcg tgg gat tca aag aag cac aca ggc tac gtc ggc tta aag aat cag 856
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90      205      210      215
92 gga gcg act tgt tac atg aac agc ctg cta cag acg tta ttt ttc acg 904
93 Gly Ala Thr Cys Tyr Met Asn Ser Leu Leu Gln Thr Leu Phe Phe Thr
94 220      225      230      235
96 aat cag cta cga aag gct gtg tac atg atg cca acc gag ggg gat gat 952
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118      320      325      330
120 atc cag tgt aaa gaa gta gac tat cgg tct gat aga aga gaa gat tat 1240
121 Ile Gln Cys Lys Glu Val Asp Tyr Arg Ser Asp Arg Arg Glu Asp Tyr
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124 tat gat atc cag cta agt atc aaa gga aag aaa aat ata ttt gaa tca 1288
125 Tyr Asp Ile Gln Leu Ser Ile Lys Gly Lys Lys Asn Ile Phe Glu Ser
126      350      355      360
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129 Phe Val Asp Tyr Val Ala Val Glu Gln Leu Asp Gly Asp Asn Lys Tyr
130      365      370      375
132 gac gct ggg gaa cat ggc tta cag gaa gca gag aaa ggt gtg aaa ttc 1384
133 Asp Ala Gly Glu His Gly Leu Gln Glu Ala Glu Lys Gly Val Lys Phe
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142				415					420					425			
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146				430					435					440			
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149	Asp	Pro	Ala	Asn	Tyr	Ile	Leu	His	Ala	Val	Leu	Val	His	Ser	Gly	Asp	
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153	Asn	His	Gly	Gly	His	Tyr	Val	Val	Tyr	Leu	Asn	Pro	Lys	Gly	Asp	Gly	
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156	aaa	tgg	tgt	aaa	ttt	gat	gac	gac	gtg	gtg	tca	agg	tgt	act	aaa	gag	
157	Lys	Trp	Cys	Lys	Phe	Asp	Asp	Asp	Val	Val	Ser	Arg	Cys	Thr	Lys	Glu	
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165	Arg	His	Cys	Thr	Asn	Ala	Tyr	Met	Leu	Val	Tyr	Ile	Arg	Glu	Ser	Lys	
166				510					515					520			
168	ctg	agt	qaa	gtt	tta	cag	gcg	gtc	acc	gac	cat	gat	att	cct	cag	cag	1816
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173	Leu	Val	Glu	Arg	Leu	Gln	Glu	Glu	Lys	Arg	Ile	Glu	Ala	Gln	Lys	Arg	
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176	aag	gag	cgg	cag	gaa	gcc	cat	ctc	tat	atg	caa	gtg	cag	ata	gtc	gca	
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182				575					580					585			
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189	Glu	Phe	Val	Gln	Ser	Leu	Ser	Gln	Thr	Met	Gly	Phe	Pro	Gln	Asp	Gln	
190				605					610					615			
192	att	cga	ttg	tgg	ccc	atg	caa	gca	agg	agt	aat	gga	aca	aaa	cga	cca	2104
193	Ile	Arg	Leu	Trp	Pro	Met	Gln	Ala	Arg	Ser	Asn	Gly	Thr	Lys	Arg	Pro	
194	620								625					630			2152
196	gca	atg	tta	gat	aat	gaa	gcc	gac	ggc	aat	aaa	aca	atg	att	gag	ctc	
197	Ala	Met	Leu	Asp	Asn	Glu	Ala	Asp	Gly	Asn	Lys	Thr	Met	Ile	Glu	Leu	
198				640						645				650			
200	agt	gat	aat	gaa	aac	cct	tgy	aca	ata	ttc	ctg	gaa	aca	gtt	gat	ccc	2200

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206				670				675					680				
208	gat	gta	atg	tta	ttt	ttg	aag	atg	tat	gat	ccc	aaa	acg	cgg	agc	ttg	2296
209	Asp	Val	Met	Leu	Phe	Leu	Lys	Met	Tyr	Asp	Pro	Lys	Thr	Arg	Ser	Leu	
210				685			690					695					
212	aat	tac	tgt	ggg	cat	atc	tac	aca	cca	ata	tcc	tgt	aaa	ata	cgt	gac	2344
213	Asn	Tyr	Cys	Gly	His	Ile	Tyr	Thr	Pro	Ile	Ser	Cys	Lys	Ile	Arg	Asp	
214	700				705					710					715		
216	ttg	ctc	cca	gtt	atg	tgt	gac	aga	gca	gga	ttt	att	caa	gat	act	agc	2392
217	Leu	Leu	Pro	Val	Met	Cys	Asp	Arg	Ala	Gly	Phe	Ile	Gln	Asp	Thr	Ser	
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222				735				740					745				
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226				750				755					760				
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230				765			770				775						
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233	Leu	Pro	Thr	Ala	Lys	Glu	Tyr	Phe	Arg	Asp	Leu	Tyr	His	Arg	Val	Asp	
234	780				785						790					795	
236	gtc	att	ttc	tgt	gat	aaa	aca	atc	cct	aat	gat	cct	gga	ttt	gtg	gtt	2632
237	Val	Ile	Phe	Cys	Asp	Lys	Thr	Ile	Pro	Asn	Asp	Pro	Gly	Phe	Val	Val	
238				800						805					810		
240	acg	tta	tca	aat	aga	atg	aat	tat	ttt	cag	glt	gca	aag	aca	glt	gca	2680
241	Thr	Leu	Ser	Asn	Arg	Met	Asn	Tyr	Phe	Gln	Val	Ala	Lys	Thr	Val	Ala	
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246				830				835					840				
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249	Gly	Tyr	Arg	Asp	Gly	Pro	Gly	Asn	Pro	Leu	Arg	His	Asn	Tyr	Glu	Gly	
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252	act	tta	aga	gat	ctt	cta	cag	ttc	ttc	aag	cct	aga	caa	cct	aag	aaa	2824
253	Thr	Leu	Arg	Asp	Leu	Leu	Gln	Phe	Phe	Lys	Pro	Arg	Gln	Pro	Lys	Lys	
254	860					865					870				875		
256	ctt	tac	tat	cag	cag	ctt	aag	atg	aaa	atc	aca	gac	ttt	gag	aac	agg	2872
257	Leu	Tyr	Tyr	Gln	Gln	Leu	Lys	Met	Lys	Ile	Thr	Asp	Phe	Glu	Asn	Arg	
258				880						885					890		
260	cga	agt	ttt	aaa	tgt	ata	tgg	tta	aac	agc	caa	ttt	agg	gaa	gag	gaa	2920
261	Arg	Ser	Phe	Lys	Cys	Ile	Trp	Leu	Asn	Ser	Gln	Phe	Arg	Glu	Glu	Glu	
262				895					900					905			
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265	Ile	Thr	Leu	Tyr	Pro	Asp	Lys	His	Gly	Cys	Val	Arg	Asp	Leu	Leu	Glu	

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269 Glu Cys Lys Lys Ala Val Glu Leu Gly Glu Lys Ala Ser Gly Lys Leu
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272 agg ctg cta gaa att gta agc tac aaa atc att ggt gtt cat caa gaa 3064
273 Arg Leu Leu Glu ile Val Ser Tyr Lys ile ile Gly Val His Gln Glu
274 940          945          950          955
276 gat gaa cta tta gaa tgt tta tct cct gca acg agc cgg acg ttt cga 3112
277 Asp Glu Leu Leu Glu Cys Leu Ser Pro Ala Thr Ser Arg Thr Phe Arg
278          960          965          970
280 ata gag gaa atc cct ttg gac caa gtg gac ata gac aaa gag aat gag 3160
281 Ile Glu Glu ile Pro Leu Asp Gln Val Asp ile Asp Lys Glu Asn Glu
282          975          980          985
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285 Met Leu Val Thr Val Ala His Phe His Lys Glu Val Phe Gly Thr Phe
286          990          995          1000
288 gga atc ccg ttt ttg ctg agg ata cac caa ggc gag cat ttt cga gaa 3256
289 Gly ile Pro Phe Leu Leu Arg ile His Gln Gly Glu His Phe Arg Glu
290          1005          1010          1015
292 gtg atg aag cga atc caa agc ctg ctg gac atc cag gag aag gag ttt 3304
293 Val Met Lys Arg ile Gln Ser Leu Leu Asp ile Gln Glu Lys Glu Phe
294 1020          1025          1030          1035
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298          1040          1045          1050
300 aat gaa gac gag tat gaa gta aat ttg aaa gac ttt gag cca cag ccc 3400
301 Asn Glu Asp Glu Tyr Glu Val Asn Leu Lys Asp Phe Glu Pro Gln Pro
302          1055          1060          1065
304 ggt aat atg tct cat cct cgg cct tgg cta ggg ctg gac cac ttc aac 3448
305 Gly Asn Met Ser His Pro Arg Pro Trp Leu Gly Leu Asp His Phe Asn
306          1070          1075          1080
308 aaa gcc cca aag agg agt cgc tac act tac ctt gaa aag gcc att aaa 3496
309 Lys Ala Pro Lys Arg Ser Arg Tyr Thr Tyr Leu Glu Lys Ala ile Lys
310          1085          1090          1095
312 atc cat aac tgatttccaa gctggtgtgt tcaaggcgag gacggtgtgt 3545
313 Ile His Asn
314 1100
316 ggggtggccc ttaacagcct agaactttgg tgcacgtgcc ctctagccga agtcttcagc 3605
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334 <211> LENGTH: 1102
335 <212> TYPE: PRT
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FYI:

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY DATE: 11/22/2000
PATENT APPLICATION: US/09/706,325 TIME: 12:59:12

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L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1683 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:1686 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:1689 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
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